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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,114	12/12/2001	Christopher M. Hobot	P-10137	7746

27581 7590 08/08/2005

MEDTRONIC, INC.  
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EXAMINER
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HO, UYEN T

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/016,114	<b>Applicant(s)</b> HOBOT ET AL.	
	<b>Examiner</b> (Jackie) Tan-Uyen T. Ho	<b>Art Unit</b> 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 5/12/05 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,3-12, 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ju (5,403,292) in view of Choay et al. (6,905,458). Ju discloses a guide catheter comprising an elongated sheath having a wall being made from polymer and radiopaque filler such as barium sulfate (col. 3, line 36 to col. 4, line 27), the catheter having reinforcing braided (30). Although, Ju fails to disclose the catheter including echogenic and radio-opaque material, Choay et al. disclose a catheter including echogenic and radio-opaque material incorporated in the polymer that made the catheter or coating the device/catheter with echogenic and radio-opaque polymer films (col. 4, lines 20-30) in order to permit visualizing by medical imagery, both ultrasound and radiography. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a material being both radio-opaque and echogenic in order to permit visualizing by medical imagery, both ultrasound and radiography.

In regarding to Tungsten carbide particles, it would have been obvious matter of design choice to modify Ju in view of Choay's device by having the tungsten carbide particles as the echogenic and radiopaque material since applicants have not disclosed that tungsten carbide particles provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the echogenic and radiopaque materials taught by Choay or tungsten carbide particles because both perform the same function as to permit visualizing by medical imagery, both ultrasound and radiography.

In regarding to the percent of tungsten carbide particles distributed within the polymeric material, it is known that the filter increase the radio-opacity will increase. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the percent of the echogenic and radiopaque material in order to have a desired radio-opacity. Doing so would meet the percentage range as claimed.

4. Claim 1, 3, 4-9, 12, 14-18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choay et al. (6,905,458). Choay et al. disclose a catheter including echogenic and radio-opaque material incorporated in the polymer that made the catheter or coating the device/catheter with echogenic and radio-opaque polymer films (col. 4, lines 20-30) in order to permit visualizing by medical imagery, both ultrasound and radiography. Although, Choay et al. fails to disclose a second material being radio-opaque, it would have been obvious matter of design choice to make Choay's catheter

having a second radio-opaque material into the catheter since applicants have not disclosed that by having the second radio-opaque material solves any problem and for any particular purpose and it appears that the catheter would perform equal well with a second material that is not radio-opaque material.

In regarding to the tungsten carbide particles, it would have been obvious matter of design choice to modify Choay's device by having the tungsten carbide particles as the echogenic and radiopaque material since applicants have not disclosed that tungsten carbide particles provides any advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the echogenic and radiopaque materials taught by Choay or tungsten carbide particles because both perform the same function as to permit visualizing by medical imagery, both ultrasound and radiography.

In regarding to the percent of the tungsten carbide in the polymer, it is known that the filter increase the radio-opacity will increase. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the percent of the echogenic and radiopaque material in order to have a desired radio-opacity. Doing so would meet the percentage range as claimed.

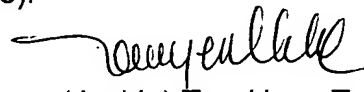
In regarding to the diameter of the particles, it is a well-known size for particles incorporated with the polymer to make catheter having echogenic characteristic. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the particles or powder of echogenic and radiopaque

material as disclosed by Choay at the size range as claimed in order to prevent a significant degrading the catheter's bulk properties and increase degree of resolution of geometry of the catheter.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Jackie) Tan-Uyen T. Ho whose telephone number is 571-272-4696. The examiner can normally be reached on MULTIFLEX Mon. to Sat..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANHTUAN NGUYEN can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
(Jackie) Tan-Uyen T. Ho  
Patent Examiner  
Art Unit 3731

July 26, 2005